

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q92261

Massimo TORMEN, et al.

Appln. No.: 10/562,014

Group Art Unit: 1722

Confirmation No.: 2979

Examiner: Unknown

Filed: March 14, 2006

For: A NANO IMPRESSION LITHOGRAPHIC PROCESS WHICH INVOLVES THE USE  
OF A DIE HAVING A REGION ABLE TO GENERATE HEAT

**REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT**

**ATTN:** Office of Initial Patent Examination

Filing Receipt Correction

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

We enclose a copy of the Official Filing Receipt for the above-identified application and  
request the following corrections:

**Assignment For Published Patent Application**

Consiglio Nazionale Delle Ricerche-INFN Istituto Nazionale per la Fisica Della Materia

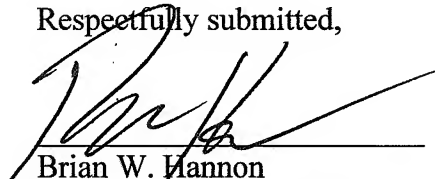
**Foreign Applications**

~~ITALY TO2003A00473 06/23/2003~~ ITALY TO2003A000473 06/23/2003

Request for Corrected Official Filing Receipt  
US Application No. 10/562,014

Verification for the requested corrections is indicated on the Declaration and Power of Attorney and Assignment filed December 23, 2005.

Respectfully submitted,

  
\_\_\_\_\_  
Brian W. Hannon  
Registration No. 32,778

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: January 19, 2007



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/562,014	03/14/2006	1722	965	Q92261	6	38	1

CONFIRMATION NO. 2979

23373  
 SUGHRUE MION, PLLC  
 2100 PENNSYLVANIA AVENUE, N.W.  
 SUITE 800  
 WASHINGTON, DC 20037

**DOCKETED**

DEC 14 2006

## FILING RECEIPT



\*OC000000021550713\*

Date Mailed: 12/12/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

## Applicant(s)

Tormen Massimo, Trieste, ITALY;

## Assignment for Published Patent Application

Consiglio Nazionale Delle Ricerche-INFN Istituto Nazionale per la Fisica Della Materia

**Power of Attorney:** The patent practitioners associated with Customer Number **23373**.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/IB04/02120 06/22/2004

## Foreign Applications

ITALY TO2003A00473 06/23/2003

ITALY TO2003A000473 06/23/2003

If Required, Foreign Filing License Granted: 12/08/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/562,014**

Projected Publication Date: 03/22/2007

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

**Title**

Nano impression lithographic process which involves the use of a die having a region able to generate heat

**Preliminary Class**

425

**PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

**DECLARATION AND POWER OF ATTORNEY FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)**

As a below named inventor, I hereby declare that: My residence, mailing address, and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

"A nano impression lithographic process which involves the use of a die having a region able to generate heat"

the application of which

☐ is attached hereto

OR

☒ was filed on June 22, 2004 as United States Application Number or PCT International Application Number PCT/IB2004/002120 (Confirmation No. \_\_\_\_\_), and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part application(s), material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application(s) having a filing date before that of the application on which priority is claimed.

Prior Application Number(s)	Country	Filing Date	Priority Claimed	
			Yes	No
TO2003A000473	Italy	June 23, 2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>

I hereby claim benefit under 35 United States Code §119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date

I hereby claim benefit under 35 United States Code §120 of any United States application(s) or §365(c) of any PCT International application(s) designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge my duty to disclose any information material to the patentability of this application as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U.S. or International Application Number(s)	U.S. or International Filing Date	Status

I hereby appoint all attorneys of **SUGHRUE MION, PLLC** who are listed under the USPTO Customer Number shown below as my attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Sughrue Mion, PLLC, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

<b>NAME OF SOLE OR FIRST INVENTOR:</b>			
Given Name (first and middle [if any])		Family Name or Surname	
TORMEN		Massimo	
Inventor's Signature		Date	
<i>Massimo Tormen</i>		10/01/2006 (otel/roman/area)	
Residence: City	State	Country	Citizenship
TRIESTE		Italy	Italian
Mailing Address: Via Giovanni Pascoli 10			
City	State	Zip	Country
TRIESTE		I-34138	Italy

Applicant or Patentee:

Serial or Patent No.:

Filed or Issued:

For:

Attorney's Docket No.:

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(c)) — SMALL BUSINESS CONCERN

I hereby declare that I am

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concerned empowered to act on behalf of the concern identified below:

NAME OF CONCERN CONSIGLIO NAZIONALE DELLE RICERCHE — INFN ISTITUTO NAZIONALE PER LA  
ADDRESS OF CONCERN FISICA DELLA MATERIA

Corso F. Perrone 24  
I-16152 GENOVA (Italy)

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled "A nano impression lithographic process which **DOCKETED** of a die having a region able to generate heat" by inventor(s)  
Massimo TORMEN

MAR 14 2006

described in:

- ☐ the specification filed herewith  
☒ application serial no. PCT/IB2004/002120, filed on June 22, 2004  
☐ patent no. , issued

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). \*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☒ NON PROFIT ORGANIZATION

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ INDIVIDUAL ☐ SMALL BUSINESS CONCERN ☐ NON PROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING ROBERTO CINGOLANI  
TITLE OF PERSON OTHER THAN OWNER CNR - INFN RESPONSIBLE  
ADDRESS OF PERSON SIGNING VIA INDRACCOLO N. 20 73100 LECCE - ITALY  
SIGNATURE [Signature] DATE January 10, 2006



## ASSIGNMENT

Whereas, I Massimo TORMEN, Italian citizen residing at: Via Giovanni Pascoli 10, I-34138 TRIESTE (Italy)

have invented a certain improvement in "A nano impression lithographic process which involves the use of a die having a region able to generate heat"

for which I have executed an application for Letters Patent of the United States herewith and  
whereas

CONSIGLIO NAZIONALE DELLE RICERCHE - INFN ISTITUTO NAZIONALE PER LA FISICA DELLA MATERIA

Corso F. Perrone 24

I-16152 GENOVA (Italy)

is desirous of acquiring an interest therein.

Now, therefore in consideration of the sum of One Dollar, the receipt of which is hereby acknowledged, I, Massimo TORMEN

by these presents do sell, assign and transfer unto the said CONSIGLIO NAZIONALE DELLE RICERCHE - INFN ISTITUTO NAZIONALE PER LA FISICA DELLA MATERIA

the full and exclusive right to the said invention, as described in the specification executed by me of even date herewith preparatory to obtaining Letters Patent in the United States therefor; and hereby request the Commissioner of Patents to issue said Letters Patent to CONSIGLIO NAZIONALE DELLE RICERCHE - INFN ISTITUTO NAZIONALE PER LA FISICA DELLA MATERIA

as the assignee, for its interest, for the sole use and behoof of said CONSIGLIO NAZIONALE DELLE RICERCHE - INFN ISTITUTO NAZIONALE PER LA FISICA DELLA MATERIA and its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent are granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

I hereby authorize and request the law firm of SUGHRUE MION, PLLC (USPTO Customer Number 23373) the power to insert on this Assignment any further identification (such as series code along with U.S. Serial Number /Patent Number ) which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document.

Executed this 10th day of January, 2006

Filippo Romanato

Luca Baccare

Massimo Tormen  
Massimo TORMEN